

SOL Instruction Tracking Form

Grade 7 Mathematics

Place the SOL Instruction Tracking Form after the VGLA Collection of Evidence (COE) Coversheet. Use the SOL Instruction Tracking Form to track the evidence collected for submission.

7.1 The student will	
	compare
	fractions,
	decimals, and
	percents.
	order
	fractions,
	decimals, and
	percents,
	determine equivalent relationships between fractions, decimals, and percents, including scientific notation for numbers greater than 10.
7.2 The student will simplify expressions that contain rational numbers (whole numbers, fractions, and decimals) and positive exponents, using	
	order of operations,
	mental mathematics, and
	appropriate tools.
7.3 The student will identify and apply the following properties of operations with real numbers:	
a)	the commutative and associative properties for addition and multiplication;
b)	the distributive property;
c)	the additive and multiplicative identity properties;
d)	the additive and multiplicative inverse properties; and
e)	the multiplicative property of zero.
7.4 The student will	
a)	solve practical problems using rational numbers
	whole numbers,
	fractions,
	decimals, and
	percents;
b)	solve consumer-application problems involving
	tips,
	discounts,
	sales tax, and
	simple interest.
7.5 The student will formulate rules for and solve practical problems involving	
	basic operations with integers.
	addition,
	subtraction,
	multiplication, and
	division

7.6 The student will use proportions to solve practical problems, which may include scale drawings, that contain		
		rational numbers
		whole numbers,
		fractions,
		decimals, and
		percents.
7.7 The student, given appropriate dimensions, will		
a)		estimate and find the area of polygons by subdividing them into
		rectangles and
		right triangles; and
b)		apply perimeter and area formulas in practical situations.
7.8 The student will investigate and solve problems involving the volume and surface area of rectangular prisms and cylinders, using		
		concrete materials and
		practical situations to develop formulas.
7.9 The student will		
		compare and contrast the following quadrilaterals:
		parallelogram,
		rectangle,
		square,
		rhombus, and
		trapezoid.
		use deductive reasoning and inference to classify quadrilaterals.
7.10 The student will		
		identify and draw the following polygons:
		pentagon,
		hexagon,
		heptagon,
		octagon,
		nonagon, and
		decagon.
7.11 The student will		
		determine if geometric figures – quadrilaterals and triangles – are similar and
		write proportions to express the relationships between corresponding parts of similar figures.
7.12 The student will		
		identify and graph ordered pairs in the four quadrants of a coordinate plane.
7.13 The student, given a polygon in the coordinate plane, will		
		represent transformations - rotation and translation - by graphing the coordinates of the vertices of the transformed polygon and
		sketching the resulting figure.
7.14 The student will		
		investigate and describe the difference between the probability of an event found through simulation versus the theoretical probability of that same event.
7.15 The student will		
		identify and describe the number of possible arrangements of several objects, using a tree diagram or the Fundamental (Basic) Counting Principle.
7.16 The student will create and solve problems involving		

		the measures of central tendency
		mean,
		median,
		mode, and
		range of a set of data.
7.17 The student, given a problem situation, will collect, analyze, display, and interpret data, using a variety of graphical methods, including		
		frequency distributions;
		line plots;
		histograms;
		stem-and-leaf plots;
		box-and-whisker plots; and
		scattergrams.
7.18 The student will		
		make inference, conjectures, and predictions based on analysis of a set of data.
7.19 The student will represent, analyze, and generalize a variety of patterns, including arithmetic sequences and geometric sequences, with		
		tables,
		graphs,
		rules, and
		words in order to investigate and describe functional relationships.
7.20 The student will		
		write verbal expressions as algebraic expressions and
		write sentences as equations.
7.21 The student will use the following algebraic terms appropriately:		
		<i>equation,</i>
		<i>inequality,</i> and
		<i>expression.</i>
7.22 The student will		
a)	solve one-step linear equations and inequalities in one variable with strategies involving inverse operations and integers, using	
		concrete materials,
		pictorial representations, and
	paper and pencil: and	
b)	solve practical problems requiring the solution of a one-step linear equation.	

Submit Quarterly to the building level administrator/designee for review:

Date Submitted/Initials	Date Submitted/Initials	Date Submitted/Initials	Date Submitted/Initials